

Translation

PATENT COOPERATION TREATY

PCT/CH2003/000018



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 02/009 WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/CH2003/000018	International filing date (day/month/year) 15 January 2003 (15.01.2003)	Priority date (day/month/year) 29 January 2002 (29.01.2002)
International Patent Classification (IPC) or national classification and IPC F01D 25/28, F02C 6/12		
Applicant ABB TURBO SYSTEMS AG		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 1 sheets.

3. This report contains indications relating to the following items:

- I  Basis of the report
- II  Priority
- III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain documents cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

Date of submission of the demand 19 July 2003 (19.07.2003)	Date of completion of this report 03 May 2004 (03.05.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/CH2003/000018

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

the international application as originally filed  
 the description:

pages \_\_\_\_\_ 1-11 \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_ \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

the claims:

pages \_\_\_\_\_ 5-13 \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, as amended (together with any statement under Article 19)  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_ 1-4 \_\_\_\_\_, filed with the letter of 08 April 2004 (08.04.2004)

the drawings:

pages \_\_\_\_\_ 1/4-4/4 \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_ \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

the sequence listing part of the description:

pages \_\_\_\_\_ \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_ \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).  
 the language of publication of the international application (under Rule 48.3(b)).  
 the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

contained in the international application in written form.  
 filed together with the international application in computer readable form.  
 furnished subsequently to this Authority in written form.  
 furnished subsequently to this Authority in computer readable form.  
 The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
 The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4.  The amendments have resulted in the cancellation of:

the description, pages \_\_\_\_\_  
 the claims, Nos. \_\_\_\_\_  
 the drawings, sheets/fig \_\_\_\_\_

5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/CH 03/00018
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## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	1-13	YES
	Claims		NO
Inventive step (IS)	Claims	1-13	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-13	YES
	Claims		NO

## 2. Citations and explanations

## 1. Reference is made to the following documents:

- D1: US-A-3 891 345 (DOOLIN JOHN H.) 24 June 1975
- D2: EP-A-0 785 389 (DRESSER RAND CO) 23 July 1997
- D3: DE 44 32 073 A (ABB MANAGEMENT AG) 14 March 1996

2. D1 is considered to be the closest prior art. With regard to claim 1, D1 discloses (the references in parentheses refer to said document) a fixing device for fixing a turbocharger comprising a turbocharger housing to a base (19), having a first and a second foot (26, 28), which can be secured in the base, the two feet (26, 28) being connectable to the turbocharger housing (see figure 4) mutually spaced apart in an axial direction (see figure 1), and the second foot (28) comprising a housing-connecting section (34), which can be connected to the turbocharger housing and is in the form of at least a partial arc (column 3, lines 7-8), a base-connecting section (44, 46), which is axially (see figures 1 and 4) spaced apart from the housing-connecting section and can be connected to the base (19), and an axial diagonal support (32), which mutually connects the two connecting sections and

forms with the base (19) an angle  $\alpha$  (see figures 1, 4 and 7), which is in the range from  $0^\circ$  to  $6^\circ$  (see claim 3).

The subject matter of claim 1 differs therefrom in that the housing-connecting section comprises an arcuate axial stop which can be positively connected to the turbocharger housing in an axial direction.

The problem addressed by the present invention can therefore be considered that of producing as rigid a connection as possible between the turbocharger and the second foot.

The stop on the housing-connecting section of the second foot makes the fixing device more rigid as a result of the positive axial attachment between the foot and the turbocharger. The axial stop is not therefore just a design measure to make assembly easier. The axial stop is, furthermore, not to be found in either D2 or D3.

Independent claim 1 is therefore novel and involves an inventive step (PCT Article 33(2) and (3)).

3. Dependent claims 2-13 are therefore also novel and involve an inventive step.
4. Contrary to the requirements of PCT Rule 5.1(a)(ii) neither the relevant prior art disclosed in document D2 nor this document is indicated in the description.